

ABSTRACT

Orthopaedics Device and System

An implantable, temporospatially dynamic, rachiorthotic orthopaedics device comprising:

- a unidirectional force generating means for generating a unidirectional force which acts over a range of deflection of said unidirectional force generating means;
- a first attachment means for attaching said unidirectional force generating means to a first vertebra; and
- a second attachment means for attaching said unidirectional force generating means to a second vertebra;

wherein said unidirectional force is applied by said unidirectional force generating means via said first and second attachment means to said first and second vertebrae such that said first vertebra and said second vertebra are urged, over a period of time (which period of time extends beyond the end of a medical procedure to implant said orthopaedics device) and over a range of rotational, axial and/or flexional/extensional motion, towards a predetermined desired spatial relationship with respect to one another, whereby, over said period of time, said unidirectional force urges a proprioceptively neutral position of said first and second vertebrae towards a desired neutral position, and whereby a biological correction of a spinal deformity, spinal injury or other spinal disorder may be mechanically facilitated.

Fig. 1